

## REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated July 11, 2005. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

### Status of the Claims

Claims 1, 3-6 and 18 are under consideration in this application. Claims 12-15 are being cancelled without prejudice or disclaimer. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

### Formality Rejection

Claims 12-15 were rejected as being in improper dependent form, and of being duplicative of claims 3 - 5. As indicated, claims 12-15 are being cancelled without prejudice or disclaimer. The objection thus becomes moot.

### Prior Art Rejection

Claims 1, 3, 4, 12, 13 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Figures 14 and 15 of the application which constitute Admitted Prior Art ("AAPA") in view of US Patent No. 5,606,438 to Margalit et al. (hereinafter "Margalit"), and claims 5, 6 and 14-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the AAPA and Margalit in view of the US Patent No. 6,580,477 B1 to Cho (hereinafter "Cho"). These rejections have been carefully considered, but are most respectfully traversed in view of the claims currently on file, as more fully discussed below.

The liquid crystal display device of the invention (e.g., Fig. 1), as now recited in claim 1, comprise: a liquid crystal display element PNL, a direct backlight having a light source CFL located right below a back surface of the liquid crystal element PNL (p. 2, lines 14-16), a substantially rectangular diffusion plate SCT which is interposed between the liquid crystal display element PNL and the light source CFL, at least one optical sheet OPS which is arranged between the diffusion plate SCT and the liquid crystal display element PNL, a transparent sheet TPS which is arranged between the diffusion plate SCT and the light source CFL and has a contour which is substantially equal to a contour of the diffusion plate SCT.

The at least one optical sheet OPS is brought into contact with the diffusion plate SCT, and four sides of the transparent sheet TPS are adhered to the diffusion plate SCT so as to define a gap therebetween that is sealed from outside air (See Abstract).

As recited in claim 5, a spacer HLD (Figs. 6-9; p. 11, 1<sup>st</sup> and 2<sup>nd</sup> full paragraphs) which restricts a warp quantity of the diffusion plate SCT in the direction toward the light source CFL.

*“All four sides, that is, the entire peripheries of the diffusion plate SCT and the transparent sheet TPS are adhered to each other using a pressure sensitive adhesive double-coated tape BA such that the inside of the adhered entire peripheries is completely sealed. Accordingly, the leaking of moisture from the inside of the adhered entire peripheries can be suppressed (p. 24, 1<sup>st</sup> paragraph).”*

Applicants respectfully submit that none of the cited prior art references teaches or suggests such “a transparent sheet TPS (1) arranged between the diffusion plate SCT and the light source CFL, (2) with a contour which is substantially equal to a contour of the diffusion plate SCT, and (3) with its four sides adhered to the diffusion plate SCT so as to define a gap therebetween that is sealed from outside air” to prevent *leaking of moisture* according to the invention.

As admitted by the Examiner (p. 5, 3<sup>rd</sup> full paragraph of the outstanding Office Action), AAPA does not teach a transparent sheet TPS with the (1)-(3) features. Margalit was relied upon by the examiner to compensate for the deficiencies. However, Margalit merely teaches that a “*defuser 42 is bonded to the underside of the bottom polarizer by a film 43 identical to film 35 (col. 3, lines 38-40)*”, while “*the film 35 is applied to the LCD sandwich by rolling the film onto the sandwich to prevent air becoming trapped therebetween. The glass 36 is applied to the upper surface of the film 35 by gently tilting the two together, starting with contact at one edge. This similarly acts to exclude air (col. 3, lines 26-30).*” As such, there is no air and NO gap between the polarizing plate 34 and the diffusion plate 42 in Margalit, rather than just “four sides of the transparent sheet TPS adhered to the diffusion plate SCT so as to define a gap therebetween that is sealed from outside air” as the invention. It is well established that a rejection based on cited references having contradictory principles or principles that teach away from the invention is improper.

Cho's bosses 260 was relied upon by the Examiner to anticipate the spacer recited in claim 5. As shown in Figs. 1-2, air flows freely via at least one heat irradiation hole 240 of the receiving container 300 (col. 4, lines 46-50). There are gaps between the diffusion sheets 400 and the receiving container 300, but they are not air-tight. As such, Cho fails to

compensate for Margalit's deficiencies.

Applicants contend that AAPA, Margalit, Cho and their combination all fail to teach or suggest each and every feature of the present invention as recited in independent claim 1. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

#### IDS references

Applicants distinguish the invention from the IDS references as follows.

1. JP6-95105A (publication date: April 8, 1994): JP6-95105A corrects the transformation of a diffusion plate with a screw which penetrates from the outside of the case. However, JP6-95105A fails to teach or suggest a left molding and a right molding of the invention.
2. JP7-64084A (publication date: March 10, 1995): JP7-64084A describes a support (16) which supports a seat (14) for an optical control and a diffusion plate (15). Both ends of the width direction and support steps part (12c, 12d) are formed respectively like L-shape. A reflector (12) supports the seat (14) for an optical control and the diffusion plate (15) in support steps part 12c, 12d. However, JP7-64084A fails to teach or suggest a structure of an edge neighborhood of a fluorescent lamp as the invention.

On the other hand, the invention controls the brightness spots, which originate in the transformation of the diffusion plate, by arranging a left mold, a right mold, and at least one spacer with which the ends of cold cathode fluorescent lamps is covered.

3. JP10-326517A (publication date: December 8, 1998): JP10-326517A prevents the center part of an optical diffusion member (2) from slackening on a source of light (1) side in arranging a spacer pin (4) in the bottom of a lamp house (3). However, JP10-326517A fails to teach or suggest a structure of an edge neighborhood of a fluorescent lamp as the invention.
4. JP2000-19990A (publication date: January 21, 2000): JP2000-19990A uses a lamp holder (3) to maintain the electrode surroundings at both ends of a lamp (2) which has a slope (11). However, the slope (11) was not provided to fix the lamps which were already fixed via other means. On the contrary, the left mold and a right mold of the invention cover each edge of two or more cold cathode fluorescent lamps to fix them to the frame.

Moreover, the lamp holder usually uses rubber with elasticity for the source of light in the case with cold cathode lamps. Therefore, it is difficult for the backlight unit described in

JP2000-19990A to control the distance of lamp (2) and a diffusion plate (5) in a lamp holder (8) with the slope. On the other hand, the left mold and the right mold of the invention possess the slope from cold cathode fluorescent lamps up and control the distance of cold cathode fluorescent lamps and the diffusion plate.

In addition, JP2000-19990A does not concern any transformation of the diffusion plate at all.

5. JP2001-194666A (publication date: July 19, 2001): The publication date (July 19, 2001) of this document is the day after the priority date of the present application thus does not constitute a priori art reference.

6. JP2001-215497A (publication date: August 10, 2001): The publication date (August 10, 2001) of this document is the day after the priority date of the present application thus does not constitute a priori art reference.

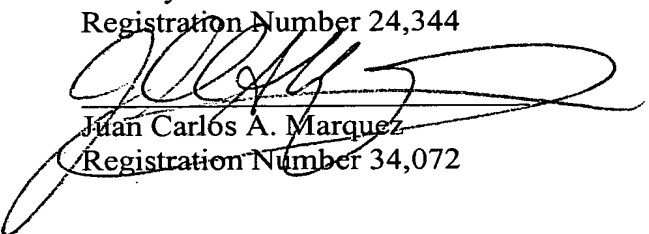
#### Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

\_\_\_\_\_  
Stanley P. Fisher  
Registration Number 24,344

  
Juan Carlos A. Marquez  
Registration Number 34,072

**REED SMITH LLP**  
3110 Fairview Park Drive, Suite 1400  
Falls Church, Virginia 22042  
(703) 641-4200  
**November 10, 2005**  
SPF/JCM/JT